

IN THE CLAIMS

This listing of claims replaces all prior versions, and listings, in this application.

Claims 1-5 (canceled)

6. (currently amended) A method of protecting one or more cell types of a human subject's nervous system comprising administration to the human subject of an effective amount of a protein S polypeptide which is greater than 95% identical in amino acid sequence to human protein S and/or at least one functional variant thereof to the to provide neuroprotection after injury caused by at least ischemia, hypoxia, re-oxygenation, or a combination thereof; wherein no protein C or activated protein C is administered one or more cell types to provide neuroprotection.

7. (currently amended) The method of Claim 6, wherein the protein S polypeptide or the functional variant is ~~[[a]]~~ human protein S ~~or functional variant~~.

8. (currently amended) The method of Claim 6, wherein the protein S polypeptide or the functional variant has at least anti-thrombotic activity.

9. (currently amended) The method of Claim 6, wherein the protein S polypeptide or the functional variant has at least anti-inflammatory activity.

10. (currently amended) The method of Claim 6, wherein the protein S polypeptide or the functional variant at least inhibits apoptosis or acts as a cell survival factor.

11. (currently amended) The method of Claim 6, wherein the protein S polypeptide or the functional variant acts through one or more receptors selected from the group consisting of annexin II and Tyro3/Axl receptor tyrosine kinases.

Claim 12 (canceled)

13. (currently amended) The method of Claim 6, wherein there is no deficiency of protein S activity in the human subject.

Claims 14-15 (canceled)

16. (currently amended) The method of Claim 6, wherein the protein S polypeptide ~~or the functional variant~~ is administered before and/or after diagnosis of disease or another pathological condition.

17. (currently amended) The method of Claim 6, wherein cerebral blood flow in the human subject's brain is increased by administration of the protein S polypeptide ~~or the functional variant~~.

18. (currently amended) The method of Claim 6, wherein volume of the human subject's brain which is affected by injury, infarction, edema, or a combination thereof is decreased by administration of the protein S polypeptide ~~or the functional variant~~.

Claims 19-24 (canceled)

25. (new) A method of treating neurotrauma comprising administration to a human subject of an effective amount of a protein S polypeptide which is greater than 95% identical in amino acid sequence to human protein S to treat neurotrauma, wherein no protein C or activated protein C is administered.

26. (new) The method of Claim 25, wherein the protein S polypeptide is human protein S.

27. (new) The method of Claim 25, wherein the protein S polypeptide has at least anti-thrombotic and anti-inflammatory activities.

28. (new) The method of Claim 25, wherein the protein S polypeptide acts through one or more receptors selected from the group consisting of annexin II and Tyro3/Axl receptor tyrosine kinases.

29. (new) The method of Claim 25, wherein there is no deficiency of protein S activity in the human subject.

30. (new) A method of treating stroke comprising administration to a human subject of an effective amount of a protein S polypeptide which is greater than 95% identical in amino acid sequence to human protein S at least to treat stroke, wherein no protein C or activated protein C is administered.

31. (new) The method of Claim 30, wherein the protein S polypeptide is human protein S.

32. (new) The method of Claim 30, wherein the protein S polypeptide has at least anti-thrombotic and anti-inflammatory activities.

33. (new) The method of Claim 30, wherein the protein S polypeptide acts through one or more receptors selected from the group consisting of annexin II and Tyro3/Axl receptor tyrosine kinases.

34. (new) The method of Claim 30, wherein there is no deficiency of protein S activity in the human subject.